

Amendments to the Claims:

1. (Currently Amended) A stent with a tubular support frame (2) that can be ~~widened-out~~ expanded from an initial state (A) ~~into~~ to a support state (S), in which the support state ~~tubular support frame (2) consists of~~ comprises at least two annular segments (3-6) that are formed by struts (7, 8, 9,10) that ~~endlessly follow each other~~ are interconnected in a corrugated manner via transitional sections (11, 12) and in which adjacent annular segments (3-6) are coupled by connectors (13), wherein one of the annular segments (3-6) corresponds to a proximal end of the tubular support frame (2) and one of the annular segments corresponds to a distal end of the tubular support frame, ~~characterized in that every second front~~ wherein every other transitional section (12) at the proximal and distal ends of the tubular support frame (2) on the end-side annular segments (3; 6), viewed in the direction of the longitudinal axis (L) of the stent, has a widened head end (18) that axially projects axially opposite the adjacent transitional sections (11) proximally at the proximal end and distally at the distal end and has a convexly rounded front section (19) and concavely rounded throat sections (20, 21) between the head end (18) and the struts (9,10) connected to the head end (18), and wherein the concavely rounded throat sections (20, 21) are configured to intermesh with adjacent transitional sections (11) in the initial state (A).

2. (Original) The stent according to Claim 1, characterized in that the head ends (18) are configured in a mushroom shape and that the convex front sections (19) and the concave throat sections (20,21) are connected to each other by rounded edge sections (22,23).

3. (Canceled)

4. (Currently Amended) The stent according to Claim 1, further comprising a plurality of deflection elements (24,25) for a thread looping around the outside of the support frame (2) that are arranged on the end-side annular segments (3, 6) at the proximal and distal ends of the support frame, ~~viewed in the direction of the longitudinal axis (L) of the stent.~~

5. (Currently Amended) The stent according to Claim 1, ~~characterized in that~~ wherein each connector (13,13') is ~~designed like a strut~~ and has a longitudinal section (14,14') running substantially parallel to ~~the~~ a longitudinal axis L of the stent and comprises a

compensation section (15,15') aligned transversally to the latter and configured in a U or V shape.

6. (Currently Amended) The stent according to Claim 5, ~~characterized in that the~~ wherein the U-shaped or V-shaped compensation sections (15,15') of the connectors (13,13') are arranged in the an area (16) between two axially adjacent, spaced annular segments (3,4, 5,6).

7. (Currently Amended) The stent according to Claim 1, ~~characterized in that the~~ further comprising an annular segment (4, 5) interconnected to an adjacent annular segment (3, 6) at the proximal or distal ends of the tubular support frame (2), wherein the connectors (13,13') extend out from the a ridge area (17) of two struts (7,8) of [[an]] the annular segment (4, 5) between two struts (7, 8) of the adjacent annular segments (3, 4,5, 6) at the proximal and distal ends of the tubular support frame (2) to the transitional section (11) of these struts (7,8) of the adjacent annular segment (3, 6) at the proximal or distal ends of the tubular support frame (2).

8. (Currently Amended) The stent according to Claim 1, ~~characterized in that the~~ wherein the connectors (13,13') are aligned in axial succession.

9. (New) The stent according to Claim 4, wherein each strut comprises first and second ends, and wherein each widened head portion is located at the first ends of the annular segments at the proximal and distal ends of the support frame and each deflection element is located at the second ends of the struts.

10. (New) The stent according to Claim 4, wherein at least a portion of each deflection element is configured to be positioned adjacent to at least a portion of an adjacent connector in the initial state.

11. (New) The stent according to Claim 1, wherein each strut comprises first and second ends, and wherein each head end is spaced outwardly from the first ends of adjacent struts by a distance corresponding to the concavely rounded throat sections.

12. (New) The stent according to Claim 1, wherein each widened head end axially projects further proximally at the proximal end of the tubular support frame and further distally at the distal end of the tubular support frame than an adjacent transitional section.

Appl. No.: 10/573,950
Amdt. dated 12/27/2007
Reply to Office action of 09/27/2007

13. (New) The stent according to Claim 1, wherein each transitional section comprises convexly curved side edges that are configured to intermesh with adjacent concavely rounded throat sections in the initial state (A).